

**What is claimed is:**

1. A cooling device for cooling an electronic element producing concentrated heat by a flow of a cooling medium, comprising:

5 a first flow channel disposed upstream of the electronic element in the flow of the cooling medium;

a second flow channel disposed downstream of the electronic element in the flow of the cooling medium; and

10 an active heat transport element comprising a heat intake portion and a heat outlet portion, the active heat transport element conducting heat from the heat intake portion to the heat outlet portion, the heat intake portion being thermally connected with the first flow channel so as to conduct heat from the cooling medium, the heat outlet portion being thermally connected with the second flow channel so as to conduct heat to the cooling medium.

15 2. The cooling device according to claim 1, further comprising:

20 a cooling portion for cooling the electronic element by the cooling medium, the cooling portion being disposed downstream of the first flow channel and upstream of the second flow channel in the flow of the cooling medium.

25 3. The cooling device according to claim 2, wherein:

the first flow channel, the second flow channel and the cooling portion are integrally formed.

4. The cooling device according to claim 1, wherein:

the active heat transport element is a Peltier element.

5. An electronic device having an electronic element producing concentrated heat, the electronic device having a first chassis for housing the electronic element and a second chassis connected with the first chassis by means of a hinge so as to be foldable, comprising:

10 a cooling medium circuit comprising a pump for circulation of a cooling medium between the first chassis and the second chassis;

15 a cooling device housed in the first chassis and connected with the cooling medium circuit, the cooling device comprising: an active heat transport element comprising a heat intake portion and a heat outlet portion, the active heat transport element conducting heat from the heat intake portion to the heat outlet portion;

20 a first flow channel thermally connected with the heat intake portion so as to conduct heat from the cooling medium to the heat intake portion; a cooling portion for heat exchange between the electronic element and the cooling medium; and

25 a second flow channel thermally connected with the heat outlet portion so as to conduct heat from the heat outlet portion to the cooling medium, wherein the cooling medium flows from the first flow channel via the cooling portion to the second flow channel; and

a heat radiation unit housed in the second chassis and connected with the cooling medium circuit so as to radiate heat transported from the cooling device.